

IN THE SPECIFICATION:

The paragraph bridging pages 3 and 4, please amend as follows:

The periodic auto-correlation function (ACF) and aperiodic auto-correlation function (AACF) of $g_0(i)$ are shown in Fig. 13 (b), and the cross correlation function (CCF) and aperiodic cross correlation function (ACCF) between $g_0(i)$ and $g_1(i)$ are shown in Fig. 13 (c). On the axis of abscissas in the diagram, τ is a shift variable taking an integer.

Page 9, third full paragraph, please amend as follows:

Fig. 2 (a) is a diagram ~~showing~~ showing a transmitter base band circuit in an embodiment of the invention, and (b) is a diagram showing a receiver base band circuit.

Page 11, second full paragraph, please amend as follows:

~~[[The]]~~ When using ZCZ sequence family with sequence length N (even number), the ZCZ sequences take ~~sequence is a sequence in which~~ the correlation value ~~[[takes]]~~ 0 in a limited shift range $\tau = -\Delta$ to Δ ($\Delta < N/2$) centered on $\tau = 0$ (excluding $\tau = 0$ as for ACF) in the whole shift range $\tau = -N/2$ to $N/2$ centered on $\tau = 0$, ~~when using ZCZ sequence family with sequence length N (even number).~~ Such ZCZ family can be made from a complementary sequence pair, and sometimes it is denoted by a symbol 2Δ -ZCZ. (Such ZCZ family can be shown by 2Δ -ZCZ.)

Page 12, second full paragraph, please amend as follows:

In ~~[[this]]~~ the above example of the method of producing a ZCZ sequence, a case that the family size is $M = 2$ is shown, but a larger size family can be produced by the same technique. It is, however, known that the value Δ ~~[[is]]~~ decreases according to the following equation. (The detail is given in Collected Paper 1027 of Kyushu Branch General Meeting of the Institute of Electronics, Information and Communication Engineers, 1998).

The paragraph bridging pages 14 and 15, please amend as follows:

As shown in Fig. 1 (b), by copying the heading portion (ℓT_C , T_C : chip period) and tail portion (ℓT_C) of the spreading sequence P, and disposing them as in the rear and front slots outside the sequence P as ~~P'_H and P'_T~~ P'_T and P'_H shown in the drawing, respectively, an expanded frame P_E with chip length $(N + 2\ell)$ is formed. That is, the spreading sequence P with N chips is converted into a spreading sequence P_E with $(N + 2\ell)$ chips. The frame period T_E of P_E is given as follows.

$$\left. \begin{array}{l} T_E = (1 + \alpha) T \\ \alpha = 2\ell / N \end{array} \right\} \quad \cdot \cdot \cdot \quad (6)$$

The paragraph bridging pages 18 and 19, please amend as follows:

where $d_j, d_{j'} (1 \leq j, j' \leq M)$ are element sequences of d . The greatest common divisor of N_1 and N_2 is g. c. d $(N_1, N_2) = 1$, in other words, they are mutually prime. In this set d , the polarity inverted sequence of an element sequence is not included. [[The]] Code set d is a block code in which the 0-shift cross correlation between a pair of the element sequences satisfies the following equation (10).

$$L = |R[d_j, d_{j'}, 0]| = N_2 - 2H \quad \cdot \cdot \cdot \quad (10)$$

where $R[d_j, d_{j'}, \tau]$ expresses the τ shift periodic cross correlation value between sequences d_j and $d_{j'}$.